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camel
anchoring the upstream duct to the upstream vessel by expanding the third
expandable anchoring mechanism into the upstream vessel.

REMARKS

Applicant has amended claims 1, 25, 37 and 38. Claims 1-40 are pending in the present application. Reexamination and reconsideration of the application, as amended, is respectfully requested.

Examiner has rejected claims 1-40 under 35 U.S.C. §102(b) as being anticipated by Quiachon et al., U.S. Patent No. 5,628,783. Applicant has amended independent claim 1 to make clear that the main catheter has an "a hollow cylindrical tube having a length along a portion housing the bifurcated graft and defining an inner diameter measuring less than seven millimeters along the length." Quiachon does not disclose that the main catheter has an inner diameter that is less than seven millimeters along a length housing a bifurcated graft. At column 15, lines 41-43, Quiachon discloses that the main sheath has a diameter at its proximal end of 6.68 mm and a diameter of 7.62 mm at its distal end. Therefore, Quiachon does not teach that the main catheter (main sheath 160) has an inner diameter less than 7 mm along a length along a portion housing a bifurcated graft, because the distal end of the main sheath disclosed in Quiachon is greater than 7 mm. For this reason, claim 1 and the claims depending from claim 1 are not anticipated by Quiachon.

Independent claim 37 has also been amended to recite that the graft delivery system has "placing a bifurcated graft within a hollow cylindrical tube having an inner diameter measuring

less than seven millimeters along its length.” Therefore, for the same reasons discussed in the previous paragraph, claim 37 is also not anticipated by Quiachon.

Applicant also believes that independent claims 25 and 38 are not anticipated by Quiachon. Claims 25 and 38 have been amended to recite one or more of the first and second release wires themselves operate to maintain an anchoring mechanism in an unexpanded condition. The anchoring mechanisms described in Quiachon are held in an unexpanded condition by capsules and not by the release wires themselves. Therefore, Applicant believes that claims 25 and 38 are not anticipated by Quiachon.

Examiner has also rejected claims 1-6, 11-13, 15, 19, 21, 25-31, 33 and 36 under 35 U.S.C. §102(b) as being anticipated by Piplani et al., U.S. Patent No. 5,489,295. Claim 1 has been amended to recited that “the set of attaching mechanisms are sutured to the bifurcated graft.” Piplani on the other hand discloses that the second leg or contralateral member has separate attachment means that are later deployed, and are therefore not sutured to the bifurcated graft. For this reason, Applicant believes that claim 1 and its dependent claims are not anticipated by Piplani.

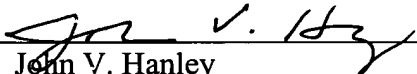
Claim 25 has also been amended to recite that “one or more of the first and second release wires themselves operating to maintain an anchoring mechanism in an unexpanded condition.” The anchoring mechanisms described in Piplani are held in an unexpanded condition by capsules, and not by the release wires themselves. Therefore, claim 25 and its dependent claims also are not anticipated by Piplani.

This paper operates to amend the claims. Attached hereto is a marked-up version of the changes made. The attached page is captioned "Version With Markings To Show Changes Made".

In view of the foregoing, Applicant respectfully submits that all claims are now in condition for allowance. Reexamination and reconsideration of the application, as amended, are respectfully requested and allowance at an early date is solicited.

Respectfully submitted,

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Version With Markings to Show Changes Made

IN THE CLAIMS

Please amend claims 1, 25, 37, and 38 and substitute the amended claims for the pending claims with the same numbers.

1. (Amended) A system for intraluminally delivering a bifurcated graft across a corporeal lumen, the corporeal lumen being formed of a superior vessel having a vessel bifurcation and extending into an ipsilateral vessel and a contralateral vessel, the system comprising:

5 a bifurcated graft formed of a superior member having a graft bifurcation and extending into an ipsilateral member and a contralateral member;

a set of positioning mechanisms capable of intraluminally positioning the bifurcated graft into the corporeal lumen;

a set of attaching mechanisms capable of attaching the superior member to the superior vessel, the ipsilateral member to the ipsilateral vessel, and the contralateral member to the contralateral vessel, the set of attaching mechanisms being sutured to the bifurcated graft;

a main catheter housing the bifurcated graft, the set of positioning mechanisms, and the set of attaching mechanisms, the main catheter configured as a hollow cylindrical tube having a length along a portion housing the bifurcated graft and defining an inner diameter

15 measuring less than seven millimeters along the length;

whereby the bifurcated graft, the set of positioning mechanisms and the set of attaching mechanisms are housed within the main catheter for intraluminal delivery of the bifurcated graft.

25. (Amended) A system for placing a bifurcated graft in a lumen formed by a wall proximate a vascular bifurcation having an aneurysm, the system comprising:

a bifurcated graft having a superior extremity, an ipsilateral inferior extremity, and a contralateral inferior extremity;

5 a first anchoring mechanism attached to the superior extremity;

a second anchoring mechanism attached to the ipsilateral inferior extremity and configured to be self-expandable;

a third anchoring mechanism attached to the contralateral inferior extremity and configured to be self-expandable;

10 a first release wire releasably attached to the ipsilateral inferior extremity [second anchoring mechanism] such that the second anchoring mechanism maintains an unexpanded condition;

a second release wire releasably attached to the [third anchoring mechanism] contralateral inferior extremity such that the third anchoring mechanism maintains an
15 unexpanded condition;

wherein one or more of the first and second release wires themselves operate to maintain an anchoring mechanism in an unexpanded condition; and

a delivery catheter configured to contain the bifurcated graft, the first anchoring mechanism, the second anchoring mechanism, the third anchoring mechanism, the first release wire and the second release wire.

37. (Twice Amended) A method of positioning a bifurcated graft across a vascular bifurcation formed by an upstream vessel a first down stream vessel and a second downstream vessel using a bifurcated graft delivery system having a first catheter having a hollow cylindrical tube, a bifurcated graft formed by an upstream duct, a first downstream duct and a second downstream duct, disposed within the first catheter, a second catheter connected to the first downstream duct and disposed within the first catheter, and a third catheter connected to the second downstream duct and folded within the first catheter, and a snare guidewire comprising the steps of:

placing the bifurcated graft within the hollow cylindrical tube having an inner diameter less than seven millimeters along its length;

advancing the delivery system through the first downstream vessel and into the upstream vessel;

withdrawing the first catheter such that the bifurcated graft, the second catheter and the third catheter are exposed within the upstream vessel;

unfolding the third catheter;

advancing the snare guidewire through the second downstream vessel;

snaring the third catheter with the snare catheter;

pulling the first downstream duct into the first downstream vessel by withdrawing the second catheter; and

20 pulling the second downstream duct into the second downstream vessel by withdrawing the third catheter.

38. (Amended) A method for repairing a bifurcated vascular vessel formed by an upstream vessel a first downstream vessel and a second downstream vessel using a bifurcated graft delivery system having a delivery catheter, a bifurcated graft formed by an upstream duct, a first downstream duct and a second downstream duct, disposed within the delivery catheter, a
5 first expandable anchoring mechanism attached to the first downstream duct, said first expandable anchoring mechanism being self-expanding, a first release wire releasably fastened to the first expandable anchoring mechanism such that the first expandable anchoring mechanism is maintained in an unexpanded state, a second expandable anchoring mechanism attached to the
- second downstream duct, said second expandable anchoring mechanism being self-expanding, a
10 second release wire releasably fastened to the second expandable anchoring mechanism such that the second expandable anchoring mechanism is maintained in an unexpanded state, and a third expandable anchoring mechanism attached to the upstream duct, comprising the steps of:

configuring one or more of the first and second release wires themselves to maintain an anchoring mechanism in an unexpanded condition;

15 inserting the bifurcated graft delivery system intraluminally into the bifurcated vascular vessel;

withdrawing the delivery catheter such that the bifurcated graft is exposed within the bifurcated vascular vessel;

positioning the bifurcated graft within the bifurcated vascular vessel, such that the
20 upstream duct extends into the upstream vessel, the first downstream duct extends into the first
downstream vessel, and the second downstream duct extends into the second downstream vessel;

anchoring the first downstream duct to the first downstream vessel by releasing the first release wire [from the first downstream expandable anchoring mechanism] whereby the first expandable downstream mechanism expands into the first downstream vessel;

25 anchoring the second downstream duct to the second downstream vessel by releasing the second release wire [from the second downstream expandable anchoring mechanism] whereby the second expandable downstream mechanism expands into the second downstream vessel;

anchoring the upstream duct to the upstream vessel by expanding the third
30 expandable anchoring mechanism into the upstream vessel.